

Rural Transport, Communication and Social Infrastructure

Sharad Singla,* Aniruddha Guin,* Souma Suvra Ghosh*

1. INTRODUCTION

Social infrastructure is to a country what backbone is to a human body. The prospect of the inhabitants of a country depends upon the development of its social infrastructure, the foundation of which is laid by transportation and communication.

With a huge man power of over 100 crores and its diversity and varied heritage India still lags behind most of the other countries in the world as far as progress in basic scientific amenities and other such developments are concerned. Three fourth of India's population living in more than six lakh villages has over 300 million people below the poverty line with an illiteracy rate exceeding 50%.

2. THE MAIN BASE OF SOCIAL INFRASTRUCTURE IS LITERACY

Francis Bacon had once declared that knowledge is power. In today's world the vital force influencing the social infrastructure of the country is literacy. Certain measures have been taken for literacy campaign by the government of India. But we seriously need to know whether those processes are producing any effective result.

Due to various social and economic problems India's education program continues to be undercut. Those living in rural areas are the worst victims of the educational system. Allocation of government funds and the conditions of the destitute rural schools contribute to the low quality of education of rural children. However, Kerala, a rural state of India, remains a puzzle to many educators. Its literacy rate does not follow the trend of the rural areas of other Indian states.

3. A FEW FACTS

The problem of illiteracy is especially acute among females, two-third of whom are illiterate as compared to one third of male. Though school

education is free, there are too few schools in the villages to make a dent on illiteracy. Most of the municipal and government primary schools already set up are in a pathetic condition. Overall enrolments in primary and middle schools are very low.

The high prevalence of child labour in India further compounds the problem of illiteracy. Census data report that 75 million children, ages 6-14, do not attend school, 44 million of whom are child labourers. In the rural context, the girl child typically remains at home to care for younger children, tend to household chores, and to work in the fields. Tragically, the male child is often "sold" into bonded labour to alleviate the debt of poor families.

Fifty percent of children living in these areas leave school before the fifth grade. These children leave school for variety of reasons : some leave because of lack of interest; most leave so that they can work in the fields, where the hours are long and the pay is low. As these children grow into adults, many are still illiterate by the age of forty.

A large number of teachers refuse to teach in rural areas and those who do not are usually under qualified. While many rural schools search for proper resources, the distribution of government funds is the major hindrance to the educational system.

4. IT IS NOT AN IMPOSSIBLE TASK TO BE DONE

Though rural children continue to be deprived of a formal education, the education system of Kerala, a state in southern India, is an exception. Coupled with the government and private donations the education system has been able to benefit in Kerala. More schools are being built and more teachers are willing to work there. Although its economy is only growing slowly and unemployment rate is high, its literacy rate, mortality rate and life expectancy are comparable to the richer regions of

* 3rd Year student of Computer Science & Technology

the country. Other rural areas can learn from Kerala so that its success can be duplicated.

5. RESULTANTS

The consequence of illiteracy is quite severe. Superstitions are rooting in the society. It is the reason for which we still read the news of burning a woman or a whole family just for suspecting them to be witch. People in villages still use many conventional methods and techniques in cultivation and other areas of application. They are not even aware of the advancement of the world surrounding them. They cannot take advantage of the banking systems for financial aid. So the economic structure also breaks down. Social boycott against patients infected with leprosy, AIDS, thalassemia is quite common.

6. RURAL TRANSPORT-LOW PRIORITY

The importance of rural transport to economic and social development is obvious. If a proper rural transport system had been provided, it would have functioned as a catalyst and efficient instrument for accelerating rural development and bringing about social equity. But rural transport in India over today is far behind requirements. According to the National Transport Policy Committee (NTPC), Fair Weather Roads (FWR) connected only 55% of villages in India.

7. UNDERDEVELOPED VILLAGES

Rural people migrate to urban areas for job opportunities. Government's efforts to induce doctors, teachers, administrators and other professionals to work in rural areas have failed. This is obviously because villages do not have basic facilities and amenities, such as markets, hospitals, schools and colleges, entertainment, clubs, workshops, places of worship, trained personnel, intellectual climate, etc. The long distance to the nearest school discourages the village children from education. Even to get a minimum medical treatment the villagers have to run to the cities. In some places villagers have to walk a long distance to fetch drinking water. Companies do not wish to establish factories in

rural areas, as they cannot attract professionals and technicians to work there.

8. MEANS OF TRANSPORT

The Indian Institute of Management at Bangalore and the National Council for Applied Economic Research at New Delhi conducted a survey of rural transport in 1989 which showed that carts play a predominant role for movement within a village, while trucks and tractors dominate outflow. Out of 15 million carts, 12 million are estimated to be in rural areas, which may be transporting about six billion tonne km of freight per year. Passenger transport is mainly by bicycles and motorized vans in FWRs, and buses of various sizes and capacities in All Weather Roads (AWRs). Studies also show that more than 60% of passenger trips - by walk, bicycle or bus - are for agricultural operations, education and business, irrespective of the size of the settlement.

9. RURAL TRANSPORT SYSTEM AND PLANNING

The government has slowly, but very reluctantly, opened up road building for private participation. If the responsibility of laying the national and state highways as well as their maintenance is given to the private sector, government can divert available funds for district and village roads. The private sector is not interested in this as it would not be profitable for them. Also, it is not easy for the private sector to earn revenue through tolls on such roads.

10. URBAN RELIEF

Job opportunities, markets, education and health facilities, cultural activities, social amenities, etc. still remain concentrated around the urban regions and migration to the cities and towns continues, making population in cities exceed the desirable limit. Therefore, from the point of view of saving urban areas from further decay, migration to urban areas has to be slowed down. One easy way to improve the quality of life in villages is to improve rural transport system, which will provide access to markets, facilitate social contacts, connect employment centers, etc.

With a high degree of connectivity, people can live in their village homes and commute to nearby towns for work. They can even travel, by buses/trains for two hours either way to do their work.

11. SYMBIOTIC DEVELOPMENT

It may be recalled that the British put up 50,000 km of rail track, covering many towns where there was no economic activity. The same concept should apply for rural transport. India should not wait for the demand to come first for justifying roads and road transport. Providing roads and road transport would spur economic activity. Roads and transport will then become economically viable for investment and operation. Thus it will alleviate unemployment problem.

12. ELECTRICITY AS A BASE OF COMMUNICATION

In the past, messages were carried by runners, carrier pigeons, drumbeats and torches. However, with the advancement of science and technology, these modes of communication have been superseded by electrical communication systems that can transmit signals over much longer distances and are much more reliable and economical. Electricity as a base of communication has emerged as the most powerful tool for the enhancement and development of social infrastructure and to sustain human life.

13. COMMUNICATION IN INDIA

Newspaper, radio, television, transportation facilities (bus, car, railways, aeroplanes), telephone, telegraph, etc. are the basic modes of communication in India. The use of internet, fax and satellite communication has gained momentum in recent times. However, India as a "third world country" with a developing economy, lags far behind in the use of modern communication systems as compared to the other developed countries in the world. With a major part of the Indian population residing in rural areas, they are the worst affected

for underdevelopment in communication channels for obvious reasons hinders the building up of social infrastructure in a country.

14. AN OVERVIEW OF COMMUNICATION IN RURAL INDIA

Recent surveys have shown nearly 80,000 villages in India devoid of electric facilities and others enjoying a meager percentage of it with frequent power cuts. It remains a fact that, till date, India is capable of producing electricity that is only half of its actual requirements.

A partial summary of the communication-infrastructure survey shows low telephone density (.0089 phones per household) and only 0.29 television sets per household, that too in the most developed rural areas of India. Most of the villages in India still remain unconnected by rail. In an era of fax and internet, postal communication remains the most dependable means of communication in most of the rural areas of India.

15. CAUSES OF SUCH BACKWARDNESS

Lack of proper resources, unawareness in rural population about the latest developments, inefficient means of implementing development programmes, economic and political crises, superstitions, etc. are some of the major causes of backwardness in rural areas. To sum up, all these causes may be attributed to a single cause "illiteracy". With a major portion (52.34%) of India reeling under the evil of illiteracy, proper utilization of whatever resources are available also suffers a setback.

16. REMEDIES

The problems can be solved by the combined and co-operative efforts of government and those affected. India's network must reach the villages if it is to make a meaningful contribution to the quality of life. If it serves only the cities, it will increase the pressure for urban migration, a problem that haunts the cities all over the world.

A few statistics regarding current telecommunication infrastructure in Pondicherry villages is given to reveal the picture.

Village	House holds	Poverty Hholds	Population	Telephones		TV Sets		Post Office
				Public	Private	Total	Cable	
Sorapet	626	264	3,052	1	3	300	150	y
Vampupet	160	118	786	1*	0	100	10	n
Sellipet	424	313	1,899	2	0	110	50	y
Thondamanatham	472	51	2,394	1	8	300	45	y
Ramanathapuram	356	50	1,613	1	3	50	59	n
Pillayarkuppam	421	54	2,058	1	1	75	50	y
Olavaikal	106	12	733	1	0	14	0	n
Oussudu	444	5	2,227	1*	0	25	0	n
Uruvaiyaru	531	45	2,513	1*	4	50	n. a.	n
Sathamangalam	433	268	2,095	1	4	75	30	y
Kizhur	400	120	2,095	1*	4	30	30	y
Totals	4,373	1,300	21,465	12	27	1,129	424	
* = not working								
poverty = annual household income < 12,000 Rupees (≈ \$300)								
Source : M. S. Swaminathan Research Foundation, June, 1998.								

A few measures to improve the situation are :

- Setting up of village information shops that enable rural families access a basket of modern information and communication technologies and training educated youth, especially women, in rural areas in operating these information shops;
- Training the rural youth for maintenance of a system that generates locally relevant information from generic information;
- Maintenance, updating and dissemination of information on entitlements of rural families using an appropriate blend of modern and existing channels of communication;
- Conducting impact assessment based on organization of surveys, participatory rural appraisal and other appropriate methods of data gathering;
- Building a model of information dissemination and exchange in rural areas that uses advanced information and communication technologies.

17. CONCLUSION

Gandhiji's dream of a prosperous rural India and the pledges given by successive leaders could be realized only if transport and communications are improved. Other physical and social infrastructure would follow automatically, paving the way for business and industry to thrive. With devolution of powers to zillas, taluks and villages, conditions may improve in the next few years. Information technology can bring improved production and marketing of agricultural products, finished goods, and medicinal plants, education, and entertainment to rural India. With such measures in action, we can dream of a developed India in not very distant a future.